Appendix C Residential and Agricultural Cost Schedules

Contents

Residential Dwelling Units Cost Tables

SCHEDULE A

Dwelling Base Prices (in hundreds of dollars) 100 to 1475

	First Floor			Half Upper Story			(+/- 1)		Full Upper Story			Unfin	Attic	Unfin		Bsmt
Area	1 - 5	+	6 - 8	1 - 5	+	6 - 8	1 - 5	6 - 8	1 - 5	+	6 - 8	Attic	Fin	Bsmt	Crawl	Fin
100																
125																
150																
175																
200																
225																
250																
275																
300																
325																
350																
375																
400																
425																
450																
475																
500																
525																
550																
575																
600																
625																
650																
675																
700																
725																
750																
775																
800																
825																
850																
875																
900																
925																
950																
975																
1000																
1025																
1050																
1075																
1100																
1125																
1150																
1175																
1200																
1225																
1250																
1275																
1300																
1325																
1350																
1375																
1400																
1425																
1450																
1475																

SCHEDULE A (continued)

Dwelling Base Prices (in hundreds of dollars) **1500 to 2875**

	First Floor			Half Upper Story			(+/- 1)		Full Upper Story			Unfin	Attic	Unfin		Bsmt
Area	1 - 5	+	6 - 8	1 - 5	+	6 - 8	1 - 5	6 - 8	1 - 5	+	6 - 8	Attic	Fin	Bsmt	Crawl	Fin
1500																
1525																
1550																
1575																
1600																
1625																
1650																
1675																
1700																
1725																
1750																
1775																
1800																
1825																
1850																
1875																
1900																
1925																
1950																
1975																
2000																
2025																
2050																
2075																
2100																
2125																
2150																
2175																
2200																
2225																
2250																
2275																
2300																
2325																
2350																
2375																
2400																
2425																
2450																
2475																
2500																
2525																
2550																
2575																
2600																
2625																
2650																
2675																
2700																
2725																
2750																
2775																
2800																
2825																
2850																
2875																

SCHEDULE A (continued)

Dwelling Base Prices (in hundreds of dollars) **2900 to 5000**

	First Floor			Half Upper Story			(+/- 1)		Full Upper Story			Unfin	Attic	Unfin		Bsmt
Area	1 - 5	+	6 - 8	1 - 5	+	6 - 8	1 - 5	6 - 8	1 - 5	+	6 - 8	Attic	Fin	Bsmt	Crawl	Fin
2900																
2925																
2950																
2975																
3000																
3025																
3050																
3075																
3100																
3125																
3150																
3175																
3200																
3225																
3250																
3275																
3300																
3325																
3350																
3375																
3400																
3425																
3450																
3475																
3500																
3525																
3550																
3575																
3600																
3625																
3650																
3675																
3700																
3725																
3750																
3775																
3800																
3825																
3850																
3875																
3900																
3925																
3950																
3975																
4000																
4250																
4500																
4750																
5000																

SCHEDULE A.1
Dwelling Pricing Notes

"A" FRAME TYPE RESIDENCES
The standard residential schedule should be used to compute the replacement cost new of "A" Frame type construction. If the entire living area is on one (1) level, price as one (1) story. If there is a loft living area, which is commonly the case with "A" Frames, the actual area of the loft should be priced from the Loft Schedule.

KIT TYPE LOG HOMES
Kit type log homes are defined as log homes, offered as a model by the builder. All logs are precut and preassembled, following a standard set of plans. There is little or no flexibility in style, size or quality available from the manufacturer. Because of the post and beam frame and log exterior walls, the cost of a log home with eight (8) inch log walls will cost ninety-five percent (95%) of a conventional home of the same general quality, and a home with six (6) inch log walls will cost ninety percent (90%). The standard residential schedule should be used to compute the cost new of a log home with five percent (5%) or ten percent (10%) decrease in grade and design.

CUSTOM TYPE LOG HOMES
Custom log homes are built individually from customized drawings and floor plans. These homes are individually constructed for specific owners. Custom log walls can run from ten (10) inches to fourteen (14) inches in thickness. The cost of a new log home with ten (10) inch log walls will cost one hundred percent (100%) of a conventional home of the same general quality and a home with approximately fourteen (14) inch walls will cost one hundred five percent (105%). The residential schedule should be used to compute the cost new of a log home with either no change or a five percent (5%) increase in grade and design.

Note: Owner-built log homes are often of a lower quality grade than professionally crafted and erected log homes.

POLE TYPE CONSTRUCTION HOMES
When determining replacement on pole type construction, the difference in cost, as compared with conventional construction, should be reflected in the quality grade. The factor should be lowered by a full grade. In other words "C" would be "D" and "D", in pole type construction, would be "E".

Note: Pole buildings of mixed use, i.e., both storage and living area, should be priced from the schedule which is most represented in the pole structure. For example, if a pole building is eighty percent (80%) storage and twenty percent (20%) living area, it should be priced from the type - 3 barn schedule with the appropriate amount added, from the bottom of the schedule for the actual finished living area. If, however, eighty percent (80%) of the pole building is finished living area and twenty percent (20%) is unfinished storage, then price the entire building as finished living area with the appropriate deduction from the residential schedule applied to the actual unfinished area.

KIT TYPE GEODESIC DWELLINGS
Kit type geodesic homes are predesigned and prefabricated by the manufacturer and sold to the home buyer as a unit, without much opportunity for the buyer to add individuality. A large portion of these homes are owner built. These homes should be priced from the residential schedule A. The quality grades for these types of homes will generally run five percent (5%) to ten percent (10%) lower than a conventional dwelling, with the lower grades being assigned to pre - fabricated, owner constructed, and unprofessional type dwellings.

CUSTOM BUILT GEODESIC DWELLINGS
Custom built or "built to suit" geodesic dwellings are individually designed, fabricated and professionally constructed to the specific style requested by the owner. These dwellings are often built with unique features not found in conventional type construction. These homes should be price from the residential schedule A. The quality grades will follow those of conventional type construction with the use of a five percent (5%) to ten percent (10%) increase in cost and design factor to reflect the uniqueness of construction.

Note: For all Geodesic dwellings, if there is a loft living area, the actual area of the loft should be priced from the Loft Schedule.

EARTH HOMES
When pricing an earth home, the following specifications are to be utilized:

Floor	four (4) inch concrete, steel mesh reinforced
Walls	ten (10) inch steel reinforced concrete
Support Walls	six (6) inch concrete extending out fourteen (14) foot, tapering six (6) foot to two (2) foot high
Roof	
conventional	included in base specifications
concrete	four (4) concrete steel mesh reinforced, increase the grade and design factor by five percent (5%)

In determining replacement costs new for earth homes the base area should be computed and related to the general pricing schedule as one (1) story concrete. The quality grading of such constructed buildings will vary much as conventional type structures. However, most earth homes will be "C" grade.

PERCENTAGE OF COMPLETION
The following is a guideline for estimating the percent completion for a typical average quality single family residence.

1. Excavation, forms, water/sewage hook up and concrete	14%
2. Rough framing	21%
3. Windows, exterior door and floor cover	5%
4. Rough - in plumbing, insulation and electrical service	16%
5. Exterior	6%
6. Interior drywall and ceiling finish	8%
7. Built - in cabinets, interior doors, trim, etc.	13%
8. Plumbing fixtures	5%
9. Floor covers and built - in appliances	6%
10. Light fixtures, painting and decorating	6%
TOTAL	100%

SCHEDULE B

Row Type Adjustments

		Total Number of Units						
		2	3	4	6	8	10	Over 10
Frame or Equal Wall Types	(1-5)							
Brick or Equal Wall Types	(6-8)							

For masonry increments of 3 or less, use frame factor.
For masonry increments of 4 or more, use brick factor.

SCHEDULE C

Base Price Componets and Adjustments (in hundreds of dollars)

	Deduct (-) Unfinished Int		Deduct (-) No Central Heating				Deduct (-) No Electricity		Add (+) Central Air Conditioning				Add (+) Basement Recreation Room				Add (+) For Loft
Area	Half Story	Full Story	First Floor	Half Upper	Full Upper	Attic	First Floor	Upper Floor	First Floor	Half Upper/Loft	Full Upper	Attic	Rec 1	Rec 2	Rec 3	Rec 4	
100																	
200																	
300																	
400																	
500																	
600																	
700																	
800																	
900																	
1000																	
1100																	
1200																	
1300																	
1400																	
1500																	
1600																	
1700																	
1800																	
1900																	
2000																	
2100																	
2200																	
2300																	
2400																	
2500																	
2600																	
2700																	
2800																	
2900																	
3000																	
3100																	
3200																	
3300																	
3400																	
3500																	
3600																	
3700																	
3800																	
3900																	
4000																	
5000																	

Note : For areas above 5,000 square feet extrapolation procedures are applicable in 1000 square foot increments for all columns other than " Loft " column

SCHEDULE D
Plumbing and Built-Ins (in hundreds of dollars)

Base price includes kitchen sink, one (1) 3 - fixture bathroom (sink, toilet and tub or tub/shower combination), water heater and accessories commensurate with the quality grade for one (1) living unit. Make the following addition and deductions as required.

Deduct for no plumbing per living unit
Deduct for water only
Add per fixture more than five per unit
Deduct per fixture less than five per unit

Add for each additional living unit depending on whether the unit was originally designed as an individual family unit, or later converted to accommodate an additional family. Note that all attic apartments are to be considered as conversion units. The plumbing count for both the designed and conversion unit is five (5) plumbing fixtures.

Designed
Conversion

NOTE: Per fixture prices reflect only the cost of plumbing for the fixture and the cost of the fixture itself. The cost of the structure's original plumbing system is included in the total per living unit cost.

Add for specialty items:
Per each bathtub with jet
Per each bathtub with steam conversion

Per Sauna bath:
- 2 person capacity
- 4 person capacity
- 6 person capacity
- 8 person capacity
- 10 person capacity

Per Steam bath:
- 2 person capacity
- 4 person capacity
- 6 person capacity
- 8 person capacity
- 10 person capacity

Per whirlpool (permanent installation with water source):
- 2 person capacity
- 4 person capacity
- 6 person capacity
- 8 person capacity
- 10 person capacity

Per portable spas (nonpermanent installation without water source): all sizes

SCHEDULE E.1
Interior Features

Fireplaces (in hundreds of dollars)
Average Quality Stack

	Masonry	Prefab Steel
First Opening		
Each additional opening		

A fireplace with two (2) openings on the same floor (see through) counts as one (1) fireplace opening.

SCHEDULE E.2
Garages and Carports

Add or deduct per value point - $100.00

Area >	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	+50
Car Capacity >		--	1	+			--	2	+		--	3	+		--	4	+		--	5	+		--	
Attached Garage, add per item																								
Frame or Equal																								
Brick or Equal																								
Integral Garage, deduct per item																								
Per car capacity																								
Basement Garage, add per item																								
Add per item, per capacity																								
Attached Carports, add per item																								
Integral roof extension																								
Shed type																								

SCHEDULE E.2 (continued)

Additions (1)

Add per value point - $100.00

3 WALL ADDITION ATTACHED AT 1 END

		Area																			
		25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500
1S Frame/Slab	1S FR																				
Add for Half Upper	1/2 FR/1																				
Add for Full Upper	FR/																				
1S Brick/Slab	1S BR																				
Add for Half Upper	1/2 BR/1																				
Add for Full Upper	BR/																				
Add for Basement	-/B																				
Add for Crawl	-/C																				

3 WALL ADDITION ATTACHED AT 1 SIDE OR A SQUARE ADDITION

		Area																			
		25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500
1S Frame/Slab	1S FR																				
Add for Half Upper	1/2 FR/1																				
Add for Full Upper	FR/																				
1S Brick/Slab	1S BR																				
Add for Half Upper	1/2 BR/1																				
Add for Full Upper	BR/																				
Add for Basement	-/B																				
Add for Crawl	-/C																				

2 WALL ADDITION

		Area																			
		25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425	450	475	500
1S Frame/Slab	1S FR																				
Add for Half Upper	1/2 FR/1																				
Add for Full Upper	FR/																				
1S Brick/Slab	1S BR																				
Add for Half Upper	1/2 BR/1																				
Add for Full Upper	BR/																				
Add for Basement	-/B																				
Add for Crawl	-/C																				

Add for attic finish and basement finish from Schedule A.

Adjust for unfinished interior, heating, air conditioning and basement rec rooms from Schedule C. (2)

Add for plumbing from Schedule D.

Add for fireplaces and exterior features from Schedule E.

Adjust for quality grade from Schedule F.

Note (1): The primary purpose of this table is to accommodate annual maintenance by providing the means to price additions as line - entries, rather than repricing the entire dwelling. It is not intended for use during general revaluation's other than pricing additions to mobile homes as may be required.

Note (2): Adjustments for unfinished interior, heating and air conditioning from Schedule C are the difference between the adjustment applicable to the total area and the area including the addition and the area existing prior to the addition. For example, the deduction for no heating in a four hundred (400) square feet addition to a one thousand two hundred (1,200) feet dwelling with no heating would be calculated as the difference between the deduction for one thousand six hundred (1,600) feet and the deduction for one thousand two hundred (1,200) square feet; similarly the additive for air conditioning in the same addition to a one thousand two hundred (1,200) square feet air conditioned dwelling would be calculated as the difference between the additive for one thousand six hundred (1,600) square feet and the additive for one thousand two hundred (1,200) square feet.

Appendix C Residential and Agricultural Cost Schedules

Exterior Features

Add per value point - $100.00

		Area															Per
		25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	100
PATIOS																		
Concrete, at Grade	ConcP																	
Flagstone or Brick	FsP, BrP																	
Treated Pine	WdP																	
Add for Terraced Type	T																	
CANOPIES																		
Roof Extension	RFX																	
Conventional Shed Type	Cnpy																	
PORTICOS																		
Two Story Height	Port																	
STOOPS																		
Masonry, Elevated	MStp																	
PORCHES																		
Open Frame or Equal	OFP																	
Add per Upper Floor																		
Enclosed Frame or Equal	EFP																	
Add per Upper Floor																		
Open Masonry	OMP																	
Add per Upper Floor																		
Enclosed Masonry	EMP																	
Add per Upper Floor																		
**BAYS																		
Frame or Masonry	Bay																	
Add per Upper Floor																		
WOOD DECKS																		
Treated Pine or Equal	WdDk																	
BALCONIES																		
Uncovered, w/Railing	Balc																	
SOLARIUMS	SOL																	

**Reference is to extended living floor space, not bay windows.

When using the exterior feature schedule, round the exterior feature's square footage to the nearest twenty-five (25) square feet. There is no need to interpolate between sizes. In the per one hundred (100) column, four hundred forty-nine (449) square feet rounds to four hundred (400) square feet, whereas, four hundred fifty (450) or more square feet rounds to five hundred (500) square feet.

SCHEDULE F

Quality Grade and Design Factor

-1	E	+1	+2			-1	C	+1	+2					-1	A	+1	+2	-1	AA	+1	+2	-1	AAA
				-1	+2					-1	B	+1	+2										
30	40	50	60	70	90	95	100	105	110	115	120	130	140	150	160	180	200	220	240	270	300	330	360
	E						C				B				A				AA		-		AAA

Residential Yard and Agricultural Yard Structures Cost Tables

SCHEDULE G.1
Residential Yard Improvements

Detached Garages
Per square foot

	Detached Garages				Add for Living - Quarters Over Garage							
	Average Quality				Half Story			Full Story			Deduct for Unfin. Int.	
Area	Pole	Frame	C.B.	Brk/Stn	Frame	C.B.	Brk/Stn	Frame	C.B.	Brk/Stn	Half Story	Full Story
100												
150												
200												
250												
300												
350												
400												
450												
500												
550												
600												
650												
700												
750												
800												
900												
1000												
1100												
1200												
1300												
1400												
1500												
1600												
1700												
1800												
1900												
2000												
2100												
2200												
2300												
2400												

Deduct for earth floor
Add for unfinished loft

Make applicable adjustments from Schedules C-D-E-F.
From Schedule C for living quarters:
1. No heat only, deduct first floor price.
2. No electric, deduct upper floor price.
3. Air conditioning, add first floor price.

From Schedule D for living quarters:
No plumbing, deduct for a conversion unit.

Note: The unfinished deduction for living quarters includes amounts for interior finish, heating and plumbing.

Boat Houses
With or without overhead living area

Use detached garage Schedule G.1
Deduct for earth floor.
Deduct fifteen percent (15%) from base price per open side.
Add for living quarters above from detached garage schedule.

Adjust for quality grade from Schedule F.

Gazebos
Typical range per square foot

Average quality

NOTE: The above rates are for residential type gazebos only. In pricing commercial gazebos, multipliers of 2.00 to 3.00 are to be applied

SCHEDULE G.1 (continued)
Residential Yard Improvements
In Ground Swimming Pools

Per square foot, contractor installed, three (3) foot to eight (8) foot deep, including filter.

	Area											
	300	350	400	450	500	550	600	650	700	800	900	1000
Sandbase, Plastic Liner												
C.B. or Equal, Plastic Liner												
Prefab Steel, Vinyl Liner												
Reinforced Concrete												
Fiberglass												
Gunited												
Steel												
Add for Underwater Lighting												
Add for Pool Heating, Gas												
Add for Pool Heating, Electric												
Add for Ceramic Tile*												
Add for Plastic Tile*												
Deduct for Lack of Filter												

*Wall & bottom

Irregular, or kidney shaped pool — Add 15% to base
Concrete aprons — SF
Adjust for quality grade from Schedule F.

RESIDENTIAL INDOOR SWIMMING POOLS
Price area of pool enclosure as a separate part of the dwelling area from the appropriate type of enclosure schedule. Add pool cost from residential pool schedule in summary of improvements.

Above Ground Swimming Pools
Average quality installed, including pump, motor and filter

Circular Diameter	Cost	Oval/Rectangular Size	Cost
12'		10' x 20'	
14'		12' x 22'	
16'		12' x 24'	
18'		14' x 26'	
20'		14' x 28'	
24'		15' x 30'	
27'		16' x 32'	
30'		18' x 36'	
Over/SF		Over/SF	

Adjust for quality grade from Schedule F.

If subject above ground pool is within the size constraints of this schedule, use the rate nearest to the subject's size. For those above ground pools larger than those listed in the schedule, use the sq. ft. rate for the total area of the pool.

Note:
Area of circle formula is:
Area = R x R x 3.1416

Depreciate from the Above Ground Pool Depreciation Table

Sound value range

Car Sheds
Per square foot, average quality

Open type

Enclosed type (three (3) walls and open front)

Area	Frame	C.B.	Brick
100			
200			
300			
400			
500			
600			
700			
800			
1000			
1200			
1400			
1600			
1800			
2000			

Deduct for back-to-back configuration

- Frame
- C.B.
- Brick

Deduct for earth floor

- Add for stall walls
- Frame
- Brick

Adjust for quality grade from Schedule F.

SCHEDULE G.1 (continued)
Residential Yard
Improvements

Swimming Pool Enclosures
Cost represents average cost ranges per square floor of complete shell - type enclosures or buildings excluding swimming pools and aprons.

Swimming pool enclosure depreciation:
Use Swimming Pool and Pool Enclosure Depreciation Table

Type 1 Unfinished - none of the following items are finished: floor, ceiling or walls.

Type 2 Semifinished - one (1) or two (2) of the following are finished in a similar quality as the dwelling: floor, ceiling or walls.

Type 3 Finished - all of the following items: floors, ceiling and walls are finished commensurate with the quality of the dwelling.

Frame (or equal), per square foot, average quality

Area	Type - 1	Type - 2	Type - 3
100			
200			
300			
400			
500			
600			
700			
800			
900			
1000			
1200			
1300			
1400			
1500			
1600			

Brick (or equal), per square foot, average quality

Area	Type - 1	Type - 2	Type - 3
100			
200			
300			
400			
500			
600			
700			
800			
900			
1000			
1200			
1300			
1400			
1500			
1600			

Adjust for quality grade from Schedule F.

Bath Houses
Per square foot

Area	Frame	C.B.	Brick	Add Heating
100				
200				
300				
400				
500				
600				
700				
800				
900				
1000				
1100				
1200				

Price includes 1 - hose bib and shower
Deduct for no plumbing

Add per additional fixture
Adjust for quality grade from Schedule F.

Utility Sheds
Per square foot, average quality

Area	Fr/Mtl	C.B.	Brick/Stn
25			
50			
75			
100			
125			
150			
175			
200			
250			
300			
350			
400			
500			

Adjust for quality grade from Schedule F.
Sound value range
Use the twenty (20) year depreciation schedule.

SCHEDULE G.1 (continued)
Residential Yard
Improvements

Greenhouses

Per square foot, average quality, steel/tubular framed glass

Area	Free Standing	Attached 1 End	Lean To
50			
100			
150			
200			
250			
300			
350			
400			
500			
600			
800			
1000			

Adjust for quality grade from Schedule F.
Use the twenty (20) year depreciation schedule.

Tennis Courts

Add per value point - $100
Typical cost per court, 60' x 120' average quality, including fencing.

	Type		
	Clay	Sod	Asphalt
Single Court			
Add per Multiple			

Adjust for quality grade from Schedule F.

Stables

Per square foot, average quality

Area	Frame	C.B.	Brick
200			
300			
400			
500			
600			
700			
800			
900			
1000			
1200			
1400			
1600			
1800			
2000			
3000			
4000			

Deduct for earth floor
Add for unfinished loft
Add for masonry walls
Adjust for quality grade from Schedule F.

Note: Price pole frame construction from pole barn table (Type - 3) in Schedule G.2

Residential - Type Solar Heating and Cooling Systems

INDEPENDENT SOLAR SYSTEM (COMPLETE) RATES

Type	Liquid System	Air System
A		
B		
C		
D		

COMPONENT COSTS OF INDEPENDENT SOLAR SYSTEM

SOLAR COLLECTION UNITS

Type	SF	Per Unit
A	30	
B	25	
C	20	
D	minimal	

SOLAR STORAGE MEDIUMS

	Liquid Storage	
Type	Gallons	Per Tank
A	120	
B	80	
C	60	
D	40	

	Rock Storage	
Type	Surface SF	Per Container
A	400	
B	300	
C	200	
D	Under 200	

SOLAR DISTRIBUTION UNITS

(Includes the cost of pipe loops, transfer pumps, heat exchangers, air handlers, blowers, ducts, controls and control panels associated with either a liquid or air system.)

Type	
A	
B	
C	
D	(integrated with existing base system.)

SCHEDULE G.1 (continued)
Residential Yard Improvements

Geothermal Heating and Cooling System Base Rates

HORIZONTAL CLOSED LOOP SYSTEMS

System Tonnage	HCLSWD w/distribution	HCLSWOD w/o distribution
2 Ton		
2.5 Ton		
3 Ton		
3.5 Ton		
4 Ton		
5 Ton		
6 Ton		

VERTICAL CLOSED LOOP SYSTEMS

System Tonnage	VCLSWD w/distribution	VCLSWOD w/o distribution
2 Ton		
2.5 Ton		
3 Ton		
3.5 Ton		
4 Ton		
5 Ton		
6 Ton		

OPEN DISCHARGE OPEN LOOP SYSTEMS

System Tonnage	ODOLSWD w/distribution	ODOLSWOD w/o distribution
2 Ton		
2.5 Ton		
3 Ton		
3.5 Ton		
4 Ton		
5 Ton		
6 Ton		

RETURN WELL OPEN LOOP SYSTEMS

System Tonnage	RWOLSWD w/distribution	RWOLSWOD w/o distribution
2 Ton		
2.5 Ton		
3 Ton		
3.5 Ton		
4 Ton		
5 Ton		
6 Ton		

Interpolation Procedures - Type 3 Barns

1. Select the model width and length closest to the subject.
2. Select (or calculate) the square foot rate applicable to each of the two (2) areas immediately smaller than and larger than the subject.
3. Calculate the difference in the whole dollar value applicable to each of the areas selected in step #2.
4. Divide the result from step #3 by the difference in the areas used in step #2.
5. Apply the rate arrived at in step #4 to the difference in the area of the subject and the smaller area of the two (2) used in step #2.
6. Add the result from step #5 to the whole dollar value calculated for the smaller area in step #3 and round the result to the nearest ten dollars ($10.00).

Note: For areas larger than those included in the table, calculate the additive value by following the same procedure (steps #1 to #6) for the two (2) largest representative areas provided.

Chicken, Duck, Turkey Barns

(Typically associated with floor type operations.)
Per square foot, average quality, 12' eaves height

Area	Rate	+/- 2	Area	Rate	+/- 2
2000			7000		
2400			8000		
2800			9000		
3200			10000		
3600			12000		
4000			14000		
4400			16000		
4800			18000		
5200			20000		
5600			22000		
6000			24000		

Prices are for metal clad, wood or light metal framed buildings with earth floor, minimal lighting and mechanically operated ventilator upper side walls.

Included for lighting
Add for plumbing
Add for concrete floor
Add for roof insulation
Add for loft floor

Adjust for quality grade from Schedule F
Use the twenty (20) year depreciation schedule.

SCHEDULE G.2
Farm Buildings and Structures

Barns and Sheds

Per square foot, average quality, based either on 14' or 16' eaves heights, depending on type.

Type-1 Special purpose dairy and horse barns, 2-story with masonry stable walls and wood or metal sided loft walls, concrete ground floor, lighting, ventilation bibs, and drains, stalls and stanchions.

Type-2 General purpose conventional framed barns, 1-story flat or 2-story bank type with masonry foundation or lower level walls, wood or metal sided upper walls, concrete ground floor, plumbing, lighting and stalls.

		(1)-Dairy		(2)-Bank & Flat		
				2-Story	1-Story	
		Height				
Size	Area	16'	+/-2'	8 + 16'	16'	+/-2'
24 x 24	576					
24 x 30	720					
24 x 40	960					
24 x 60	1440					
24 x 80	1920					
24 x 100	2400					
30 x 40	1200					
30 x 50	1500					
30 x 60	1800					
30 x 80	2400					
30 x 100	3000					
36 x 50	1800					
36 x 60	2160					
36 x 70	2520					
36 x 80	2880					
36 x 100	3600					
40 x 60	2400					
40 x 80	3200					
40 x 100	4000					
40 x 120	4800					
40 x 140	5600					
50 x 60	3000					
50 x 80	4000					
50 x 100	5000					
50 x 120	6000					
50 x 140	7000					
60 x 80	4800					
60 x 100	6000					
60 x 120	7200					
60 x 140	8400					
60 x 160	9600					
60 x 180	10800					
60 x 200	12000					
Included for (deduct if not present):						
Stalls and other features						
Loft Floor						
Plumbing						
Lighting						
Concrete Floor						
Roof Insulation						
Add for wood loft floors, (included in Type-1)						
Add per square foot (bin area) for wood bins						
Add for stable stall walls						
Deduct for earth floor						

Adjust for quality grade from Schedule F.

Type 3 - General purpose pole-framed barns and machine sheds, 1-story, trussed roof, wood or metal siding, concrete floor and lighting. Alternative prices are given for insulated and partially open buildings.

(3)-Pole Framed General Purpose Buildings									
		All Walls		All Walls Insulated		1 Side Open		No Walls	
			+/-		+/-		+/-		+/-
Size	Area	14'	2'	14'	2'	14'	2'	14'	2'
20 x 20	400								
20 x 30	600								
20 x 40	800								
20 x 60	1200								
20 x 80	1600								
20 x 100	2000								
24 x 20	480								
24 x 30	720								
24 x 40	960								
24 x 60	1440								
24 x 80	1920								
24 x 100	2400								
24 x 120	2880								
30 x 20	600								
30 x 50	1500								
30 x 60	1800								
30 x 80	2400								
30 x 100	3000								
30 x 120	3600								
30 x 140	4200								
30 x 160	4800								
36 x 20	720								
36 x 40	1440								
36 x 80	2880								
36 x 100	3600								
36 x 120	4320								
36 x 140	5040								
36 x 160	5760								
36 x 180	6480								
40 x 20	800								
40 x 60	2400								
40 x 80	3200								
40 x 100	4000								
40 x 120	4800								
40 x 140	5600								
40 x 160	6400								
40 x 180	7200								
40 x 200	8000								
50 x 40	2000								
50 x 50	2500								
50 x 60	3000								
50 x 80	4000								
50 x 100	5000								
50 x 120	6000								
50 x 140	7000								
50 x 160	8000								
50 x 180	9000								
50 x 200	10000								
60 x 40	2400								
60 x 60	3600								
60 x 80	4800								

SCHEDULE G.2
(continued)
Farm Buildings and Structures

Barns and Sheds (continued)

(3)-Pole Framed General Purpose Buildings

		All Walls		All Walls Insulated		1 Side Open		No Walls	
Size	Area	14'	+/- 2'	14'	+/-2'	14'	+/-2'	14'	+/-2'
60 x 100	6000								
60 x 120	7200								
60 x 140	8400								
60 x 160	9600								
60 x 180	10800								
60 x 200	12000								
60 x 250	15000								
60 x 300	18000								
80 x 40	3200								
80 x 60	4800								
80 x 80	6400								
80 x 100	8000								
80 x 120	9600								
80 x 140	11200								
80 x 160	12800								
80 x 180	14400								
80 x 200	16000								
80 x 250	20000								
80 x 300	24000								
80 x 350	28000								
80 x 400	32000								
100 x 40	4000								
100 x 60	6000								
100 x 80	8000								
100 x 100	10000								
100 x 120	12000								
100 x 140	14000								
100 x 160	16000								
100 x 180	18000								
100 x 200	20000								
100 x 250	25000								
100 x 300	30000								
100 x 350	35000								
100 x 400	40000								

Included for (deduct if not present):
Stalls & other features
Loft floor
Plumbing
Lighting
Concrete floor
Roof Insulation

Add for interior finish - shop type
(Interior liner, heat, insulation, & up-graded lighting)
Add for interior finish office area
(Wall and ceiling finish, minimal ptns and floor covering)
Add for milk parlor & milk houses-Type-3
Add for wood loft floors
Add per square foot (of bin area) for wood bins
Add for stable stall walls
Deduct for Earth floor

Adjust for quality grade from Schedule F

Barns and Sheds	
Sound Value Guidelines	
Type-1	to
Type-2	to
Type-3	to

SCHEDULE G.2 (continued)
Farm Buildings and Structures

Hog Confinement Facilities

Per square foot, average quality, based on 8' eaves height

Area	Wood Frame Wood Siding	Pole Frame Metal Siding	Add for Slatted Floor	Add for Pits
600				
700				
800				
900				
1000				
1200				
1400				
1600				
1800				
2000				
2200				
2400				
2600				
2800				
3000				
3500				
4000				
4500				
5000				
5500				
6000				
7000				
7500				
8000				
9000				
10000				
11000				
12000				
13000				
14000				
15000				
16000				
17000				
18000				
19000				
20000 & Over				

Included for (deduct if not present):
Plumbing
Lighting
Concrete floor
Insulation
Walls per LF
Wood siding, wood frame
Metal siding, pole frame

Use the twenty (20) year depreciation schedule.

NOTE: When adding for pits and slatted floors, the concrete floor price included in the base building becomes the concrete floor price in the pit area.

Lean-tos

Per square foot

	Average height				
	8'	10'	12'	14'	16'
Concrete floor					
Earth floor					

Veal Confinement Facilities

Price per square foot

Area	Cost	Area	Cost
500		9500	
600		10000	
700		11000	
800		12000	
900		13000	
1000		14000	
1500		15000	
2000		16000	
2500		17000	
3000		18000	
3500		19000	
4000		20000	
4500		21000	
5000		22000	
5500		23000	
6000		24000	
6500		25000	
7000		26000	
7500		27000	
8000		28000	
8500		29000	
9000		30000	

Included for (deduct if not present):
Plumbing
Lighting
Concrete floor
Insulation
Use the twenty (20) year depreciation schedule.

Poultry Confinement Buildings

(Typically associated with cage type operations.)

Size	Area	Per square foot Wood Siding Wood Frame	Per square foot Metal Siding Wood Frame or Poles
20 x 400	8000		
20 x 600	12000		
20 x 800	16000		
20 x 1000	20000		
40 x 400	16000		
40 x 600	24000		
40 x 800	32000		
40 x 1000	40000		
60 x 400	24000		
60 x 600	36000		
60 x 800	48000		
60 x 1000	60000		

Included for (deduct if not present):
Insulation ---
Concrete floor
Plumbing
Electricity
Factor for high-rise construction:
16' to 18' eaves 120%
Factor for each upper story 75%
Use the twenty (20) year depreciation schedule.

SCHEDULE G.2 (continued)
Farm Buildings and Structures

Frame Corn Cribs

Per square foot

FREE - STANDING TYPE

Size	Area	Wood Slat	Weld Wire
6 x 24	144		
6 x 38	228		
6 x 52	312		
6 x 66	396		
6 x 80	480		

DRIVE - THRU TYPE

Size	Area	Wood Slat	Weld Wire
24 x 30	720		
28 x 30	840		
28 x 34	952		
30 x 36	1080		
30 x 40	1200		

Add for storage bins over crib
Wood slat
Weld wire
Add for lighting
Sound value range

Wire Corn Cribs

Per item
Cylindrical wire mesh cribs with concrete base, steel frame and conical steel roof.

Per bushel (1 cubic foot = .80 bushels, or 1 bushel = 1.25 cubic feet)
Included for (deduct if not present):
Concrete floor slab per sq. ft.
Roof
Add per square foot of surface for metal skin
Sound value range

See the formula located under the grain bin schedule to calculate the number of bushels.

Trench & Bunker Silos

Per linear foot
Primarily used for corn & grass silage, the trench type below grade and the bunker type above grade, open ends, concrete and plank floor and side walls. (Both side walls are included in the linear foot rate).

	Depth or Height					
	10'	12'	16'	20'	25'	30'
Trench						
Earth 30' Wide						
Plank 30' Wide						
+/-1" Wide						
Bunker						
Plank 30' Wide						
+/-1" Wide						

Use the twenty (20) year depreciation schedule.

Feed Lots

Per square foot
Canopies
Concrete flat work

Slurry Tanks

IN-GROUND

Round tanks	to	cu.ft.
Rectangular	to	cu.ft.
Plank cover, deduct		per SF
No cover, deduct		per SF

ABOVE GROUND

42 x 14
42 x 19
42 x 23
62 x 14
62 x 19
62 x 23
81 x 14
81 x 19
81 x 23
101 x 14
101 x 19
101 x 23

Use the twenty (20) year depreciation schedule.

Poultry Houses

Average quality, nonconfinement type

Area	Frame	C. B.
240		
360		
480		
600		
800		
1000		
1200		
1400		
1600		
1800		
2000		
2200		
2400		
2600		
2800		
3000		

Adjust for quality grade from Schedule F.
Sound value range

Butler Low Moisture Silage Silos

Per item

24' x 58'
27' x 59'
36' x 69'

Granaries

Per square foot, average quality

Size	Area	1 Story & Loft
24 x 36	864	
26 x 36	936	
28 x 36	1008	
28 x 40	1120	
30 x 40	1200	
36 x 40	1440	

Add for storage bins
Adjust for quality grade from Schedule F
Sound value range

SCHEDULE G.2 (continued)
Farm Buildings and Structures

Silos

Per item, typical costs including floor slabs & foundation

Diameter	Concrete		Masonry		Steel	
& Height	Stave	Reinf	Tile/C.B.	Brick	Unlined	Glass Lined
12' x 20'						
12' x 25'						
12' x 30'						
12' x 40'						
12' x 50'						
14' x 20'						
14' x 25'						
14' x 30'						
14' x 40'						
14' x 50'						
16' x 20'						
16' x 25'						
16' x 30'						
16' x 40'						
16' x 50'						
16' x 60'						
18' x 20'						
18' x 25'						
18' x 30'						
18' x 40'						
18' x 50'						
18' x 60'						
18' x 70'						
20' x 20'						
20' x 25'						
20' x 30'						
20' x 40'						
20' x 50'						
20' x 60'						
20' x 70'						
20' x 80'						
20' x 90'						
20' x 100'						
24' x 20'						
24' x 25'						
24' x 30'						
24' x 40'						
24' x 50'						
24' x 60'						
24' x 70'						
24' x 80'						
24' x 90'						
24' x 100'						
25' x 35'						
25' x 40'						
25' x 65'						
25' x 80'						
25' x 90'						
25' x 100'						
28' x 40'						
28' x 50'						
28' x 60'						
28' x 70'						
28' x 80'						
28' x 90'						
28' x 100'						
32' x 50'						
32' x 60'						
32' x 70'						
32' x 80'						
32' x 90'						
32' x 100'						

SCHEDULE G.2 (continued)
Farm Buildings and Structures

Silos (continued)

Per item, typical costs including floor slabs & foundation

Diameter & Height	Concrete Stave	Concrete Reinf	Masonry Tile/C.B.	Masonry Brick	Steel Unlined	Steel Glass Lined
36' x 60'						
36' x 70'						
36' x 80'						
36' x 90'						
36' x 100'						

Deduct for no roof

12'	18'	28'
14'	20'	30'
16'	24'	36'

Sound value range is $ 100- $ 5000

Use the twenty (20) year depreciation schedule.

SCHEDULE G.2 (continued)
Farm Buildings and Structures

Steel Grain Bins
Per item, installed

Size Dia. x Hgt.	Capacity (Bushels)	Cost	Size Dia. x Hgt.	Capacity (Bushels)	Cost	Size Dia. x Hgt.	Capacity (Bushels)	Cost
15' x 7'4"	1,035		27' x 33'0"	15,115		48' x 58'8"	84,920	
15' x 11'0"	1,555		27' x 40'4"	18,470		60' x 18'4"	41,460	
15' x 14'8"	2,070		27' x 47'8"	21,830		60' x 25'8"	58,040	
15' x 18'4"	2,590		30' x 14'8"	8,290		60' x 33'0"	74,640	
18' x 11'0"	2,240		30' x 18'4"	10,365		60' x 40'4"	91,225	
18' x 14'8"	2,985		30' x 22'0"	12,440		60' x 47'8"	107,805	
18' x 18'4"	3,730		30' x 25'8"	14,515		60' x 55'0"	124,345	
18' x 22'0"	4,480		30' x 33'0"	18,660		60' x 66'0"	149,215	
18' x 25'8"	5,225		30' x 40'4"	22,805		60' x 77'0"	174,080	
18' x 33'0"	6,720		30' x 47'8"	26,955		72' x 33'0"	107,435	
18' x 40'4"	8,210		36' x 14'8"	11,935		72' x 40'4"	131,295	
18' x 47'8"	9,705		36' x 18'4"	14,925		72 x 47'8"	155,190	
21' x 11'0"	3,050		36' x 22'0"	17,915		72' x 55'0"	179,055	
21' x 14'8"	4,060		36' x 25'8"	20,895		72' x 66'0"	214,865	
21' x 18'4"	5,170		36' x 33'0"	26,870		72' x 77'0"	250,680	
21' x 22'0"	6,095		36' x 40'4"	32,840		75' x 33'0"	116,575	
21' x 25'8"	7,110		36' x 47'8"	38,815		75' x 40'4"	142,465	
21' x 33'0"	9,145		36' x 58'8"	47,770		75' x 47'8"	168,395	
21' x 40'4"	11,175		42' x 14'8"	16,255		75' x 55'0"	194,290	
21' x 47'8"	13,205		42' x 18'4"	20,320		75' x 66'0"	233,145	
24' x 11'0"	3,980		42' x 22'0"	24,385		75' x 77'0"	272,005	
24' x 14'8"	5,310		42' x 25'8"	28,445		78' x 33'0"	126,085	
24' x 18'4"	6,635		42' x 33'0"	36,575		78' x 40'4"	154,090	
24' x 22'0"	7,960		42' x 40'4"	44,775		78' x 47'8"	182,135	
24' x 25'8"	9,290		42' x 47'8"	52,980		78' x 55'0"	210,140	
24' x 33'0"	11,945		42' x 58'8"	65,020		78' x 66'0"	252,170	
24' x 40'4"	14,595		48' x 14'8"	21,225		78' x 77'0"	294,200	
24' x 47'8"	17,250		48' x 18'4"	26,535		90' x 33'0"	167,865	
27' x 11'0"	5,040		48' x 22'0"	31,850		90' x 40'4"	205,150	
27' x 14'8"	6,715		48' x 25'8"	37,155		90' x 47'8"	242,490	
27' x 18'4"	8,395		48' x 33'0"	47,770		90' x 55'0"	279,775	
27' x 22'0"	10,075		48' x 40'4"	58,385		90' x 66'0"	335,730	
27' x 25'8"	11,755		48' x 47'8"	68,995		90' x 77'0"	391,685	

Use the twenty (20) year depreciation schedule.

To calculate the volume of a cylindrical bin:

1. Find the area of the circular base - (3.1415) x R x R (R=radius)
2. Multiply the area of the base times the height of the storage bin. This results in the cubic feet or volume of storage contained by that particular storage bin.
3. You can convert the cubic feet of storage into the number of bushels by multiplying the cubic feet or volume of storage by .80
   (3.1415) x R x R x H x .80=Number of Bushels

SCHEDULE G.2 (continued)
Farm Buildings and Structures

Milk Houses

Per square foot

	Grade		
Area	D	C	B
100			
200			
300			
400			
500			
600			
700			
800			
1000			
1200			

Sound value range

Milking Parlor

Per square foot

	Grade		
Area	D	C	B
100			
300			
500			
700			
900			
1200			
1400			
1600			
1800			
2000			
2200			
2400			

Sound value range

Tobacco Barns

Per square foot, average quality, 20' high

Frame-air curing post and beam or pole framed construction, vented siding, earth floor and ventilation.

Masonry-flue curing, masonry wall bearing construction, earth floor, and plumbing service.

	Area					
	800	1000	2000	4000	6000	8000
Frame						
Masonry						
Add or deduct for each 1' height						
Frame						
Masonry						
Add for concrete floor						
Add for lighting						

Adjust for quality grade from Schedule F.

Sound value range

Quonset Buildings

Standard galvanized steel, minimum openings, concrete footings, excluding flooring, lighting and heating

Length	Width			
(Feet)	30'	40'	60'	70'
30				
36				
48				
60				
72				
84				
96				
108				
120				
160				
200				
240				

Add per square foot floor area:

Asphalt floor

Concrete slab floor

Lighting

Insulation

Heating (unit gas heaters)

Adjust for Quality Grade from Schedule F

Potato Storage

Per square foot, average quality, 16' high

Frame - below ground storage, post and girder construction, earth bottom, and ventilation.

Masonry - masonry wall bearing construction, concrete floor, insulated walls and ceiling, and ventilation.

	Area				
	2000	4000	6000	8000	20000
Frame					
Masonry					
Add or deduct for each 1' height					
Frame					
Masonry					
Add for concrete floor					
Add for lighting					

Adjust for quality grade from Schedule F.

Sound value range

Location Cost Multiplier

Location Cost Multipliers

The residential cost schedules in this manual are based on the building costs for residential structures in the Indianapolis metropolitan area as of January 1, 2011. By applying these cost schedules, the assessing official is attempting to calculate the replacement cost new of a residential structure within his/her jurisdiction. Since construction costs vary from one jurisdiction to another, it shall be necessary to apply location cost multipliers to the costs published in this guideline in order to accurately reflect actual costs within his/her jurisdiction.

These location cost multipliers can be determined in one of two ways. The first and most accurate method is for the county assessor to develop a location cost multiplier for his/her respective county. This can be done using techniques such as surveying residential contractors to determine actual construction costs or by comparing the cost of residential structures built and sold on or about January 1, 2011 to the costs published in this manual. The county assessor may use any acceptable technique of estimating a location cost multiplier and must submit the technique and resultant multiplier to the DLGF for review and approval prior to its application in the county.

The second method, which is presented as an alternative to the preferred method, is to use the location cost multipliers listed in Table C-1 below. These multipliers have been developed by reviewing comparative cost multipliers for various Indiana localities as published in several national cost services.

The location cost multiplier is to be applied to all residential improvements, not just the main structure, in order to arrive at replacement cost new. The only exception to this is with manufactured and mobile homes, they will not receive a cost multiplier, as they are typically built in a given location and delivered to various locations to be used. The proper place for applying the location cost multiplier is discussed in Chapters 3, 4 and 5 of this manual.

Table G-1--Location Cost Multipliers by County

COUNTY	MULTIPLIER	COUNTY	MULTIPLIER	COUNTY	MULTIPLIER
Adams		Hendricks		Pike	
Allen		Henry		Porter	
Bartholomew		Howard		Posey	
Benton		Huntington		Pulaski	
Blackford		Jackson		Putnam	
Boone		Jasper		Randolph	
Brown		Jay		Ripley	
Carroll		Jefferson		Rush	
Cass		Jennings		St. Joseph	
Clark		Johnson		Scott	
Clay		Knox		Shelby	
Clinton		Kosciusko		Spencer	
Crawford		LaGrange		Starke	
Daviess		Lake		Steuben	
Dearborn		LaPorte		Sullivan	
Decatur		Lawrence		Switzerland	
Dekalb		Madison		Tippecanoe	
Delaware		Marion		Tipton	
Dubois		Marshall		Union	
Elkhart		Martin		Vanderburgh	
Fayette		Miami		Vermillion	
Floyd		Monroe		Vigo	
Fountain		Montgomery		Wabash	
Franklin		Morgan		Warren	
Fulton		Newton		Warrick	
Gibson		Noble		Washington	
Grant		Ohio		Wayne	
Greene		Orange		Wells	
Hamilton		Owen		White	
Hancock		Parke		Whitley	
Harrison		Perry			